

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-14 (canceled):

Claim 15 (previously presented): Bioreactor for culturing living cells in a liquid medium comprising:

- at least one stationary plastic bag enclosing the cells and liquid culture medium, and
- at least one means for introducing single large gas bubbles at a bottom of the vessel, the single large bubble width from 50 to 99% of the tank width.

Claim 16 (previously presented): Bioreactor for culturing living cells in a liquid medium comprising:

- at least one stationary tank enclosing the cells and liquid culture medium, and
- at least one means for introducing single large gas bubbles at a bottom of the vessel, the single large bubble width at least 98.5% of the tank width.

Claim 17 (previously presented): Bioreactor for culturing living cells in a liquid medium comprising:

- at least one stationary flexible plastic bag enclosing the cells and liquid culture medium, and
- at least one means for introducing single large gas bubbles at a bottom of the vessel, the single large bubble width from 50 to 99% of the tank width.

Claim 18 (previously presented): Bioreactor for culturing living cells in a liquid medium comprising:

- at least one stationary non-flexible plastic bag enclosing the cells and liquid culture medium, and
- at least one means for introducing single large gas bubbles at a bottom of the vessel, the single large bubble width from 50 to 99% of the tank width.

Claim 19 (new): Bioreactor for culturing living cells in a liquid medium comprising:
at least one stationary tank enclosing the cells and liquid culture medium, and
at least one means for introducing single large gas bubbles at a bottom of the vessel,
the single large bubble width from 50 to 99% of the tank width, wherein the stationary
tank is surrounded by a rigid outside container.

Claim 20 (new): Bioreactor according to Claim 19, wherein the upper part of the tank is
flared.

Claim 21 (new): Bioreactor for culturing living cells in a liquid medium comprising:
at least one stationary tank enclosing the cells and liquid culture medium, and
at least one means for introducing single large gas bubbles at a bottom of the vessel,
the single large bubble width from 50 to 99% of the tank width, wherein the width of the
single large bubble is 60% to 99% of the tank width.